

800.0119

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Pechanek et al.

Serial No.: 10/036,789

Filed: December 21, 2001

For: MANIFOLD ARRAY PROCESSOR

Group: 2155

Examiner: Eng, David

PATENT
RECEIVED
AUG 17 2003
Technology Center 2100#9/c
LDT
8-27-03
EnteredDurham, North Carolina
March 18, 2003Commissioner for Patents
Washington, D.C. 20231Amendment and Response to Restriction Requirement

Sir:

Please amend the above identified application as follows:

In the Claims

Please add the following new claims:

- 57
- 57. The array processor of claim 44 wherein the clusters of processing elements correspond to slices of a torus array shifted and wrapped into a cylinder.--
- 58
- 58. The array processor of claim 44 wherein each processing element (PE) is defined as $PE_{i,j}$, where i and j refer to the respective row and column PE positions within a conventional torus-connected array, and where $i = 0, 1, 2, \dots, N-1$ and $j = 0, 1, 2, \dots, N-1$, said PEs arranged in clusters $PE_{(i+a)(\text{Mod } N), (j+N-a)(\text{Mod } N)}$, for any i, j and for all $a \in \{0, 1, \dots, N-1\}$.--